



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,162	03/26/2004	Francisc Sandulescu	NEWT . P0107US	1975
23908 7590 05/03/2007 RENNER OTTO BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE NINETEENTH FLOOR CLEVELAND, OH 44115				
			EXAMINER UNELUS, ERNEST	
			ART UNIT 2181	PAPER NUMBER
			MAIL DATE 05/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/811,162

Applicant(s)

SANDULESCU ET AL.

Examiner

Ernest Unelus

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO-period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 10-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

RESPONSE TO AMENDMENT

Claim rejections based on prior art

Applicant's arguments filed 02/22/2007 with respect to claims 1-7 and 10-22 have been fully considered but are moot in view of the new ground(s) of rejection.

I. INFORMATION CONCERNING OATH/DECLARATION

Oath/Declaration

1. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

II. INFORMATION CONCERNING DRAWINGS

Drawings

2. The applicant's drawings submitted are not acceptable for examination purposes.

III. ACKNOWLEDGEMENT OF REFERENCES CITED BY APPLICANT

3. As required by M.P.E.P. 609(C), the applicant's submissions of the Information Disclosure Statement dated June 04, 2004 is acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending. As required by M.P.E.P 609 C(2), a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

IV. REJECTIONS BASED ON PRIOR ART

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-7 and 10, 11, 13-17, and 19-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahern et al. (EP 1 075 111) in view of Liaw et al. (US 2005/0066000).

6. As per **claim 1**, Ahern discloses a peripheral switch (see switching hub 40 of fig. 1, as describe in paragraph 0006) comprising: a plurality of sets of keyboard and mouse interfaces (user interface modules 17-32 of fig. 1, as describe in paragraph 0006), each set of keyboard and mouse interfaces having keyboard interface and mouse interface (see fig. 1 and paragraph 0006, which also describe the user interface modules 17-32 for receiving signals); a plurality of sets of host interfaces (terminals 1-16 of fig. 1), each set of host interfaces having a host keyboard and mouse interface (see paragraph 0006, which also discloses keyboard interface 1b and the mouse (cursor control device) interface 1c); a master controller (the 'master central processing unit', as discloses in paragraphs 0004 and 0022) configured to switch at least one of the sets of keyboard and mouse interfaces and at least one of the non-keyboard and

non-mouse peripheral interfaces among the host interfaces (**see paragraph 0006, which discloses keyboard and mouse being switch**); wherein a keyboard and mouse host is emulated to the keyboard interface and the mouse interface (**see paragraph 0030, which discloses emulation of keyboard and mouse host to the keyboard interface and the mouse interface**); and wherein a keyboard and a mouse is emulated to the host interface (**see paragraph 0030, which discloses emulation**), Ahern fail to disclose the peripheral switch device comprises also at least one host USB peripheral interface and at least one USB peripheral interface that is neither a keyboard interface nor a mouse interface.

Liaw discloses a peripheral switch device (**The Matrix Switching Unit 1112 of fig. 1**) comprises also at least one host USB peripheral interface (**the USB port of UST I/O module 124, as discloses in paragraph 0065**) and at least one USB peripheral interface that is neither a keyboard interface nor a mouse interface (**the USB port of UST I/O module 130, as discloses in paragraph 0065, and paragraph 0066 discloses using a 'video capture device' to plug into the USB port of UST I/O 130, as the paragraph teaches. Therefore, a 'video capture device' is neither a keyboard nor a mouse; In other words, paragraphs 0065 and 0066 teach that the USB port of UST I/O module 130 can be a port that supports a video device, which is neither a keyboard nor a mouse device**).

Ahern et al. (EP 1 075 111) and Liaw et al. (US 2005/0066000) are analogous art because they are from the same field of endeavor of matrix switching a plurality of peripheral devices.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the KVM switch as taught by Ahern and to include also a computer

management system for coupling a plurality of remote computers (e.g., personal computers, servers, etc.) to one or more user workstations to allow a system user to selectively access or control the plurality of remote computers using the user workstation's keyboard, video monitor, mouse, audio output device, audio input device or input/output ("I/O") module as taught by Liaw.

The motivation for doing so would have been because Liaw teaches that [**"This computer management system allows a system administrator to access a remote computer from one set of peripheral devices, preferably located at the system administrator's desk, without physically traveling to the remote computer. Furthermore, if the remote computer does not have a local user, the present invention eliminates the need for a second set of peripheral devices at the remote computer"** (paragraph 0023)].

Therefore, it would have been obvious to combine Liaw et al. (US 2005/0066000) with Ahern et al. (EP 1 075 111) for the benefit of creating a peripheral switch to obtain the invention as specified in claim 1.

7. As per **claim 2**, the combination of Ahern and Liaw disclose the peripheral switch of claim 1 (see rejection to claim 1 above), **"at least one user controller (the FPGA crosspoint switch of the of the switch module 41 located on the user side) communicably coupled to the master controller (see paragraph 0022, which also discloses "these crosspoint switches are preferably controlled by the main CPU. The logic device is preferably accessed by a data bus, an address bus and some control signals. This interface may be compatible to a standard microcontroller interface or a serial control link. This device is preferably**

programmable from the main CPU of the system". Therefore, the master controller and the user controller is coupled) and at least one of the keyboard and mouse interfaces (see fig. 1 and paragraph 0006), the user controller being configured to emulate a keyboard and mouse host (see paragraph 0030, which discloses emulation); and at least one computer controller (the FPGA crosspoint switch of the switch module 41 located on the host computer side) communicably coupled to the master controller and at least one of the sets of host keyboard and mouse interfaces, the computer controller being configured to emulate a keyboard and a mouse" (see paragraph 0030, which discloses emulation) (with respect to this limitation, Page 7 and 8 of Applicant's specification discloses the host controller, device controller, user controller and the computer controller to be the same controller, such as a field programmable gate arrays; similarly, Ahern discloses multiple switch modules 41 with the FPGA. See fig. 2 and paragraph 0006).

8. As per **claim 3**, the combination of Ahern and Liaw disclose the peripheral switch of claim 2 (see rejection to claim 2 above): "wherein the at least one user controller and the at least one computer controller are the same controller" (with respect to this limitation, Page 7 and 8 of Applicant's specification discloses the host controller, device controller, user controller and the computer controller to be the same controller, such as a field programmable gate arrays; similarly, Ahern discloses multiple switch modules 41 with the FPGA. See fig. 2 and paragraph 0006).

9. As per **claim 4**, the combination of Ahern and Liaw disclose the peripheral switch /of claim 2 (see rejection to claim 2 above): “wherein the at least one user controller and the at least one computer controller are communicably coupled” **[with respect to this limitation, Ahern discloses the user interface module as the user controller and the computer interface module as the computer controller, which are communicably coupled (see fig. 1) and paragraph 0030].**

10. As per **claim 5**, the combination of Ahern and Liaw disclose the peripheral switch of claim 2 (see rejection to claim 2 above): “ wherein the master controller is configured to select which of the at least one user controllers and which of the at least one computer controllers will communicate with each other **[with respect to this limitation, Ahern discloses emulation, which is perform by the master controller (switch module 41), between the at least one user controllers (user interface module) and with the at least one computer controllers (computer interface module), which communicate with each other (see paragraph 0030)].**

11. As per **claims 6 and 17**, the combination of Ahern and Liaw disclose the peripheral switch of claim 5 (see rejection to claim 5 above): “wherein the master controller is configured to direct the selected user controller and the selected computer controller to communicate with each other” **[with respect to this limitation, Ahern discloses emulation, which is perform by the master controller (switch module 41), between the at least one user controllers (user interface module) and with the at least one computer controllers (computer interface module), which communicate with each other (see paragraph 0030)].**

12. As per **claim 7**, the combination of Ahern and Liaw disclose the peripheral switch of claim 5 (see rejection to claim 5 above): “wherein the master controller is configured to select user controllers based on received user identification information and computer controllers based on computer identification information”[with respect to this limitation, see paragraph 0047 of Ahern, which discloses the selection of controllers by addresses through the main CPU, the master controller)].

13. As per **claim 10**, the combination of Ahern and Liaw disclose the peripheral switch of claim 1 (see rejection to claim 1 above), further comprising a switch communicably coupled to the master controller for switching the USB peripheral interfaces between the host USB interfaces (with respect to this limitation, Ahern discloses the master controller, as discloses in paragraphs 0004 and 0022, for switching all devices and interface and Liaw discloses switching the USB peripheral interfaces between the host USB interfaces, as discloses in paragraphs 0065 and 0066).

14. As per **claim 11**, the combination of Ahern and Liaw disclose the peripheral device switch of claim 10 (see rejection to claim 10 above): “wherein the switch is a crosspoint matrix switch” (with respect to this limitation, see fig. 1 and paragraph 0047 of Liaw, which discloses the Matrix Switching Unit).

Art Unit: 2181

15. As per **claims 12 and 18**, the combination of Ahern and Liaw disclose the peripheral switch of claim 1 (see rejection to claim 1 above): “wherein the peripheral switch is compatible with both USB 1.x and USB 2.x.” [with respect to this limitation, King discloses, in paragraph 0023, “Because the USB protocol allows multiple devices to be attached to a single USB port by using a commercially available device known as a USB hub”. In other word, With the USB hub, someone is able to use a USB 1.x or a USB 2.x. for the motivation discloses above in claim 1].

16. As per **claims 13 and 19**, the combination of Ahern and Liaw disclose the peripheral switch of claim 1 (see rejection to claim 1 above): “wherein the peripheral switch is capable of concurrently and independently switching keyboard and mouse interfaces between keyboard and mouse host interfaces and USB peripheral interfaces between host USB interfaces (with respect to this limitation, see paragraphs 0065, 0066, and 0098 of Liaw).

17. As per **claims 14 and 20**, the combination of Ahern and Liaw disclose the peripheral switch of claim 1 (see rejection to claim 1 above): “wherein the keyboard interface and mouse interface are each selected from the group consisting of: SUN, PS/2, MAC, USB, Universal, and combinations thereof” (with respect to this limitation, see paragraph 0065 of Liaw, which discloses PS/2).

18. As per **claim 15**, the combination of Ahern and Liaw disclose the peripheral switch of claim 1 (see rejection to claim 1 above): “further comprising a user interface selected from the

group consisting of: buttons, RS232 commands, Ethernet, remote toggle switch, on-screen display, and combinations thereof” (with respect to this limitation, see paragraph 0065 of Liaw, which discloses RS232 commands).

19. As per claim 16, Ahern discloses a peripheral switch (see switching hub 40 of fig. 1, as describe in paragraph 0006) comprising: a plurality of sets of keyboard and mouse interfaces (user interface modules 17-32 of fig. 1, as describe in paragraph 0006), each set of keyboard and mouse interfaces having keyboard interface and mouse interface (see fig. 1 and paragraph 0006, which also describe the user interface modules 17-32 for receiving signals); at least one user controller (the FPGA crosspoint switch of the of the switch module 41 located on the user side) communicably coupled to at least one of the sets of keyboard and mouse interfaces (see fig. 1), the user controller being configured to emulate a keyboard and mouse host (see paragraph 0030, which discloses emulation); a plurality of sets of host interfaces (terminals 1-16 of fig. 1), each set of host interfaces having a host keyboard and mouse interface (see paragraph 0006, which also discloses keyboard interface 1b and the mouse (cursor control device) interface 1c); at least one computer controller (the FPGA crosspoint switch of the of the switch module 41 located on the host computer side) communicably coupled to at least one of the sets of host interfaces (see fig. 1), the computer controller being configured to emulate a keyboard and a mouse (see paragraph 0030, which discloses emulation); and a peripheral switch (switching hub 40 of fig. 1, as describe in paragraph 0006) communicably coupled to at least one of the peripheral interfaces and to at least one of the host peripheral interfaces (see fig. 1) and configured to switch peripheral interfaces between the host interfaces

(see paragraphs 0022 and 0030); a master controller (the 'master central processing unit', as discloses in paragraphs 0004 and 0022) communicably coupled to the user controller, the computer controller, the peripheral switch, (see figures 1 and 2; (with respect to this limitation, Page 7 and 8 of Applicant's specification discloses the host controller, device controller, user controller and the computer controller to be the same controller, such as a field programmable gate arrays; similarly, Ahern discloses multiple switch modules 41 with the FPGA. See fig. 2 and paragraph 0006)) and configured to switch at least one of the sets of keyboard and mouse interfaces and at least one of the peripheral interfaces between the host peripheral interfaces (see fig. 1 and paragraph 0030); Ahern fail to disclose the peripheral switch device comprises also at least one host USB peripheral interface and at least one USB peripheral interface that is neither a keyboard interface nor a mouse interface.

Liaw discloses a peripheral switch device (The Matrix Switching Unit 1112 of fig. 1) comprises also at least one host USB peripheral interface (the USB port of UST I/O module 124, as discloses in paragraph 0065) and at least one USB peripheral interface that is neither a keyboard interface nor a mouse interface (the USB port of UST I/O module 130, as discloses in paragraph 0065, and paragraph 0066 discloses using a 'video capture device' to plug into the USB port of UST I/O 130, as the paragraph teaches. Therefore, a 'video capture device' is neither a keyboard nor a mouse; In other words, paragraphs 0065 and 0066 teach that the USB port of UST I/O module 130 can be a port that supports a video device, which is neither a keyboard nor a mouse device).

Ahern et al. (EP 1 075 111) and Liaw et al. (US 2005/0066000) are analogous art because they are from the same field of endeavor of matrix switching a plurality of peripheral devices.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the KVM switch as taught by Ahern and to include also a computer management system for coupling a plurality of remote computers (e.g., personal computers, servers, etc.) to one or more user workstations to allow a system user to selectively access or control the plurality of remote computers using the user workstation's keyboard, video monitor, mouse, audio output device, audio input device or input/output ("I/O") module as taught by Liaw.

The motivation for doing so would have been because Liaw teaches that [**"This computer management system allows a system administrator to access a remote computer from one set of peripheral devices, preferably located at the system administrator's desk, without physically traveling to the remote computer. Furthermore, if the remote computer does not have a local user, the present invention eliminates the need for a second set of peripheral devices at the remote computer "** (paragraph 0023)].

Therefore, it would have been obvious to combine Liaw et al. (US 2005/0066000) with Ahern et al. (EP 1 075 111) for the benefit of creating a peripheral switch to obtain the invention as specified in claim 16.

20. As per **claim 21**, Ahern discloses a method for switching at least one keyboard interface,

at least one mouse interface, and at least one interface that is neither a keyboard interface nor a mouse interface between host interfaces comprising (see **fig. 1** and **paragraph 0006**, which also describe the user interface modules 17-32 for receiving signals. See also video interface 1a, as describe in **paragraph 0006**, which is a non-keyboard interface); emulating a keyboard and a mouse to each host interface (s see **paragraph 0030**, which discloses emulation of keyboard and mouse host to the keyboard interface and the mouse interface); emulating a host to each keyboard interface and mouse interface (see **paragraph 0030**, which discloses emulation); receiving a switching command at a controller (see **paragraph 0022**), the switching command containing identification information (see **paragraph 0047**, which discloses the selection of controllers by addresses through the main CPU, the master controller); and using the identification information to connect at least one of the keyboard interfaces, at least one of the mouse interfaces, and at least one of the interfaces to at least one of the host interfaces (see **paragraph 0047**, which discloses the selection of controllers by addresses through the main CPU, the master controller); Ahern fail to disclose the peripheral switch device comprises also at least one host USB peripheral interface and at least one USB peripheral interface that is neither a keyboard interface nor a mouse interface.

Liaw discloses a peripheral switch device (**The Matrix Switching Unit 1112 of fig. 1**) comprises also at least one host USB peripheral interface (**the USB port of UST I/O module 124, as discloses in paragraph 0065**) and at least one USB peripheral interface that is neither a keyboard interface nor a mouse interface (**the USB port of UST I/O module 130, as discloses in paragraph 0065**, and **paragraph 0066** discloses using a 'video capture device' to plug into the USB port of UST I/O 130, as the paragraph teaches. Therefore, a 'video capture

device' is neither a keyboard nor a mouse; In other words, paragraphs 0065 and 0066 teach that the USB port of UST I/O module 130 can be a port that supports a video device, which is neither a keyboard nor a mouse device).

Ahern et al. (EP 1 075 111) and Liaw et al. (US 2005/0066000) are analogous art because they are from the same field of endeavor of matrix switching a plurality of peripheral devices.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the KVM switch as taught by Ahern and to include also a computer management system for coupling a plurality of remote computers (e.g., personal computers, servers, etc.) to one or more user workstations to allow a system user to selectively access or control the plurality of remote computers using the user workstation's keyboard, video monitor, mouse, audio output device, audio input device or input/output ("I/O") module as taught by Liaw.

The motivation for doing so would have been because Liaw teaches that [**"This computer management system allows a system administrator to access a remote computer from one set of peripheral devices, preferably located at the system administrator's desk, without physically traveling to the remote computer. Furthermore, if the remote computer does not have a local user, the present invention eliminates the need for a second set of peripheral devices at the remote computer "** (paragraph 0023)].

Therefore, it would have been obvious to combine Liaw et al. (US 2005/0066000) with Ahern et al. (EP 1 075 111) for the benefit of creating the method for switching to obtain the invention as specified in claim 21.

21. As per **claim 22**, the combination of Ahern and Liaw disclose the method of claim 21 (see rejection to claim 21 above): “further comprising: (a) determining whether the USB interface is to be switched concurrently with the keyboard interface and the mouse interface; (b) concurrently switching the USB interface with the keyboard interface and the mouse interface upon a positive determination in step (a) [**with respect to this limitation, in paragraph 0045, Ahern discloses a concurrent step of switching keyboard and mouse interfaces between keyboard and mouse host interfaces; Liaw also discloses the USB interface in paragraph 0065 and a concurrent switching in paragraph 0098**].

22. **Claims 12 and 18**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahern et al. (EP 1 075 111) in view of Liaw et al. (US 2005/0066000) as applied to claim 1, and further in view of Sartore (US pub. 2005/0138229).

23. As per **claims 12 and 18**, the combination of Ahern and Liaw disclose the peripheral switch of claim 1 (see rejection to claim 1 above), including the peripheral switch, but fail to disclose expressly wherein the peripheral switch is compatible with both USB 1.x and USB 2.x.

Sartore discloses wherein the peripheral switch is compatible with both USB 1.x and USB 2.x (see paragraph 0005).

Ahern et al. (EP 1 075 111), Liaw et al. (US 2005/0066000), and Sartore (US pub. 2005/0138229) are analogous art because they are from the same field of endeavor of switching a peripheral devices and a host device.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the KVM switch as taught by Ahern and to include also a computer management system for coupling a plurality of remote computers (e.g., personal computers, servers, etc.) to one or more user workstations to allow a system user to selectively access or control the plurality of remote computers using the user workstation's keyboard, video monitor, mouse, audio output device, audio input device or input/output ("I/O") module as taught by Liaw and an embodiment of an invention that allow a USB peripheral to communicate to a USB host even though the host and peripheral are not connected by a typical USB cable as taught by Sartore.

The motivation for doing so would have been because Sartore teaches that [**"The USB standards support various data transfer rates. USB 1.x standards support data transfer rates of 1.5 Mb/s (Low speed) and 12 Mb/s (Full speed). USB 2.x standards support 480 Mb/s (High speed) data transfer rates, in addition to supporting the Full speed and Low speed rates. Thus, USB 2.x is backwards compatible with USB 1.x. "** (paragraph 0005)].

Therefore, it would have been obvious to combine Sartore (US pub. 2005/0138229) with Liaw et al. (US 2005/0066000) and Ahern et al. (EP 1 075 111) for the benefit of creating the peripheral switch to obtain the invention as specified in claims 12 and 18.

V. RELEVANT ART CITED BY THE EXAMINER

24. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **MPEP 707.05(c)**.

25. The following reference teaches of how to increase the connectivity of a KVM switch.

U.S. PATENT NUMBER

US pub. 2002/0072892

Us pat. 6,324,605

VI. CLOSING COMMENTS

Conclusion

a. STATUS OF CLAIMS IN THE APPLICATION

26. The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. 707.07(i):

a(1) CLAIMS REJECTED IN THE APPLICATION

27. Per the instant office action, claims 1-7 and 10-22 have received a final action on the merits.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

b. DIRECTION OF FUTURE CORRESPONDENCES

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernest Unelus whose telephone number is (571) 272-8596. The examiner can normally be reached on Monday to Friday 9:00 AM to 5:00 PM.

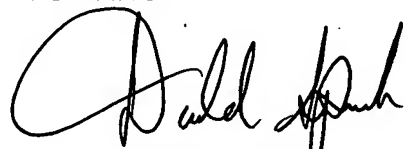
IMPORTANT NOTE

29. If attempts to reach the above noted Examiner by telephone is unsuccessful, the Examiner's supervisor, Mr. Donald Sparks, can be reached at the following telephone number: Area Code (571) 272-4201.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 26, 2007

Ernest Unelus
Examiner
Art Unit 2181

A handwritten signature in black ink, appearing to read "Donald Sparks", is written over a horizontal line.

DONALD SPARKS
SUPERVISORY PATENT EXAMINER